

Meeting #2 Summary: May 13, 2020

This meeting was held by GoToMeeting with all AC members on camera and all others participating by phone.
A list of acronyms used is provided at the end of the meeting summary.

ATTENDEES

Advisory Committee members in attendance, and the organizations and interest groups they represent:

Chip Anderson (Lummi Tribe Sewer District), tribal facilities; **Judi Gladstone** (WASWD), small-medium treatment plants; **Joseph Grogan** (Coupeville), small treatment plants; **Patrick Kongslie** (Pierce County), all treatment plant sizes; **Eleanor Ott** (Ecology), state agencies; **Mindy Roberts** (WEC), PSNGP AC environmental groups caucus lead; **Mark Sadler** (Everett), large treatment plants; **Rebecca Singer** (King Co), large treatment plants, PSNGP AC Chair, and PSNGP AC local utility caucus lead; **Valerie Smith** (Dept of Commerce), PSNGP AC state agencies caucus lead; **Wendy Steffensen** (LOTT), treatment plant with nutrient removal; **Dan Thompson** (Tacoma), large treatment plants; **Pete Tjemsland** (Sequim), small treatment plants; **Bruce Wishart** (Puget Soundkeeper), environmental groups; and **Jenny Wu** (USEPA), PSNGP AC federal agencies caucus lead.

Advisory Committee alternates in attendance, and the AC member each is designated to represent:

Abby Barnes (Valerie Smith), **Katherine Brooks** (Patrick Kongslie), **Jeff Clarke** (Judi Gladstone), **John Raebenow** (Mark Sadler), **Teresa Peterson** (Dan Thompson).

Ecology's AC support staff in attendance:

Karen Dinicola (facilitator), **Kelly Ferron** (coordinator and liaison to PSNF)

Other parties in attendance by phone are listed at the end of this document.

Purpose of this committee

To advise Ecology in drafting general permit requirements for domestic wastewater treatment plants discharging directly to Puget Sound that will lead towards reducing nutrient loads.

Ecology's Water Quality Program Manager confirms and clarifies AC purpose

Vincent McGowan, Ecology's Water Quality Program Manager underscored the purpose and goals of the AC are to give Ecology recommendations that ensure progress toward reducing nutrient inputs. Ecology is aiming to do three things in the PSNGP: a cap; monitoring; and planning. One benefit of the general permit is the flexibility for trading to meet a cap that cannot be granted through individual permits. Those of you that operate multiple plants can utilize their collective capacity to meet the cap.

Vince was asked whether other options that can be considered or if Ecology had already decided to cap treatment plant loadings. He responded that the science has gotten us to the point that Ecology is required to address permitted sources of nutrients. That said, Ecology is open to discussing other ways to keep the problem from getting worse during the first permit term.

Ecology is committed to addressing nutrient inputs from plants in a way that recognizes facility limitations and allows growth. Individual NPDES permit renewals are all on different timeframes; the PSNGP will set a baseline for everyone. It will take a long time to reduce nutrients to levels that achieve water quality standards. Ecology does not expect this first PSNGP to solve all of the problems during the first permit term. The PSNF will continue to work on the science in parallel to this committee's work. The PSNGP will limit nutrients while Ecology determines long-term targets to reduce other sources, which is

expected in 2022. During this first PSNGP plants should be taking appropriate initial steps to get ready to make necessary capital investments for technology improvements in future permit terms.

AC members adopt roles and responsibilities “charter light” document

Members shared concerns about Ecology staff facilitation, the vague definition of a “majority decision,” and how the committee might approach a presentation to the Legislature or in another venue outside the PSNF, where the chair is this committee’s designated spokesperson. **A narrow, upfront definition of “majority decision” may not serve the committee’s process.**

Vince has assigned Ecology staff roles for this process; he will continue to attend meetings as needed to address AC member concerns. The committee should begin to feel more comfortable having discussions and making recommendations. This committee will agree on many recommendations and disagree on others, and our final submittal to Ecology will reflect the preferences and concerns of all AC members – the facilitator emphasized that this documentation of AC members’ perspectives is more important than group agreement. This committee expects to continue to advise Ecology after delivering this first set of recommendations.

While some AC members were not completely satisfied with the document, all agreed that the document is sufficient to move this committee’s process forward. AC members will discuss open-ended aspects of our decision making as needed in the future.

AC members discuss cap calculation, optimization, and monitoring concepts

Cap:

Ecology’s permit writer indicated that there is not one single solution to develop effluent limits. This committee will explore where the flexibilities are for the first permit term. This committee’s final recommendation needs to land on a justifiable and defensible solution that utilizes the widely variable and in many cases very limited available data. Better plant-specific information is needed to establish caps. This committee needs to agree on what problem we’re trying to solve: seasonal or annual? An intuitive approach might look at far field inputs annually and local inputs seasonally. What science confirms where and which limits need to be met year round? Does PSNF have this answer?

Looking to the examples provided: what is a “representative” load? What is an average concentration? If only one concentration data point is available, what flow statistic should be used to calculate a load? Plant operators suggested the flow for the day of sample collection is the most accurate, and expressed concern about going too far back in time to get enough samples to provide statistical validity; better to represent current conditions. The large variance in the data will skew a calculation with insufficient data. A prior project by Ecology gathered voluntarily collected data from 29 plants in south/central Puget Sound from August 2006-October 2007. This data set could be useful to conduct some test calculations. There was a wide variation across plants, and less so within plants.

Most of the calculation discussion centered on “option #2” (non-parametric 95% confidence interval) where if a plant’s average load doesn’t increase it will still be in compliance. But concerns remain on how to calculate the average, i.e., so that seasonal variations don’t show up as a trend. Overall there is not an emerging consensus on how to pick an approach. This committee will continue to discuss this with constituents and at future meetings. Most plants would want the highest cap they can get. This committee wants to achieve an actual, not perceived, water quality improvement. And we need to focus on a plant’s overall pattern, not a single day, for assessing compliance.

These calculation approaches are 3 initial ideas; the AC will discuss other methods and approaches brought to the group.

What is a fair and equitable system? How might the cap approach utilize influent loading versus effluent loading? Can this committee propose a percent removal approach similar to the 85% removal requirement for TSS/BOD in current permits? Plants that accommodate growth without increasing concentrations should not be penalized – how would that be measured? Another observation based on the 2006-07 data set is that small plants tend to have lower concentrations and also lower flows and much smaller loading, so the opportunity for the most meaningful loading reduction is at the bigger plants. Ways to look at this in future conversations: by facility, by geography, by design versus current or contracted capacity, and addressing lack of data.

Optimization:

Many plants have already reduced concentrations by a combination of improved technology, design efficiencies, and utilization of reclaimed water systems. The PSNGP needs to identify what all plants are currently capable of and fully incentivize these types of optimization, but not penalize plants who have already gone above and beyond and/or are geographically situated to have minimal impacts. Optimization provides the most realistic means of improving water quality over the current conditions during this permit period and should be the means for many plants to comply with a cap. Some members expressed that optimization should be primary and caps secondary. The question is not either/or cap versus optimization, but how to make them complementary. The PSNGP also needs to connect optimization with short- and long-term planning appropriate for each plant.

Monitoring:

PSNGP will have new requirements overlaid on individual permit requirements. The main challenge for the cap calculation is the wide variety of and variability in the available data, and in particular the paucity of data in PARIS for many of the plants. The PSNGP will need to include a QA/QC plan for monitoring during the first permit term, or even earlier. Individual permit reissuances can fill in some gaps but the PSNGP needs widespread, long term, consistent data collection. Smaller plant operators agree that better data are needed but they're also concerned about capacity for greatly expanded monitoring requirements. This committee needs to identify what data are needed to set a defensible cap. Ten samples might be sufficient for some plants/approaches but not others.

Themes for ongoing AC discussion (note that the AC has not yet made any decisions/agreements)

Emerging areas of agreement:

- The goal is to set achievable limits or targets in this first PSNGP.
- One size is not going to fit all. Plants operate differently and impact water quality differently. There is no single solution to this problem. The PSNGP needs to look at the data for each facility.
- Optimization should be a primary focus of the PSNGP.
- Each plant should use existing resources to address nutrients to the extent possible.
- The PSNGP framework should not penalize plants who have already gone above and beyond to reduce their nutrient loadings.
- This committee should recommend an approach to gather consistent data that all plants can reasonably incorporate into their operations and improves calculations for the next PSNGP.

- This committee should consider limitations posed by current treatment technologies at each facility and as well as commitments to accommodate growth.

Outstanding questions or concerns:

- What alternates to a cap can/should be considered, i.e., targets versus limits? Or using a combination of targets and incentives? Or load reductions instead of a cap?
- Will the same caps be established for all WWTPs? Will caps be applied in zones or individually?
- What combination of approaches will keep the problem from getting worse while allowing for growth?
- How will compliance be assessed? Is adaptive management possible?
 - How will emerging science apply during the first PSNGP term?
 - Can the PSNGP allow plants to use their own ingenuity to meet goals?
 - What penalties and enforcement strategies will keep plants accountable?
- How to connect/sequence cap and optimization
- How to address the variability of data available, and gaps in the data
 - How to weave in timing of CSO events and septage intake
 - How to sequence data collection and cap calculation
- How to address near versus far field contributions and seasonality
 - How to match new PSNGP monitoring with individual permit requirements
- What should future monitoring requirements be to get better, consistent data
- How to keep plants accountable for making improvements
- Ecology's schedule and priorities for updating permits that are overdue for reissuance

Looking ahead:

- The second PSNGP will be informed by more science. It will include water quality based effluent limits (WQBELs) and be accompanied by detailed plans to address other sources of nutrients.
- Ecology does not expect capital investments during the first PSNGP. The cap is intended to be an achievable interim action before WQBELs. Pre-work, evaluation, and planning should begin during the first permit term.
- WQBELs include a compliance schedule. Beyond capital investments, implementation of advanced treatment processes (biological nutrient reduction, in particular) take time and specially trained personnel. The first PSNGP should demonstrate realistic thinking and initial steps of a long term process.
- Balance the long-term goal with short-term actions

Public comments

- Gil Bridges (Mukilteo WWWD) asked if the cap would be determined individually for all 70 plants or for different zones of Puget Sound.
- Ned Lever (Bremerton) thanked AC members for investing their time and effort. He agreed with AC member comments on optimization focus and the need for gathering data to inform long-term improvements.
- Teresa Peterson (Tacoma) expressed concern about meeting transparency with non-AC members unable to see which AC members are speaking. She reiterated the need for better

data and for plants to optimize while we wait years for capital improvements and for plants to be able to make progress without fearing permit compliance issues.

- Jeff Clarke (Mukilteo WWWD) agreed that optimization should come first to achieve environmental improvements. Data gathering is needed. He still does not fully understand the computation approaches that were presented.
- Dave Peeler (Deschutes Estuary Restoration Team) said the goal is to see loading reductions. The cap is an interim measure. Capital improvements will be needed for most plants. He would prefer to see the cap calculated from a number derived from the science rather than one of the approaches presented today.

Summary of Action Items for Ecology staff

- Send out contact list for the plants that discharge to Puget Sound
- Look deeper into 2006-07 data as a possible representative sample for cap calculations
- Ask PSNF staff for more info to guide local/far field seasonal/annual load question
- Plan to include video viewing capability for non-AC members if possible
- Continue working with AWC to invite planners to the July and August AC meetings

Summary of Action Items for AC members

- Review this meeting summary and provide timely feedback for its approval by email
- Begin gathering feedback from constituents to bring to the June AC meeting
 - Share this meeting summary along with the cap questions listed in the agenda
- Contact the chair and facilitator with questions, concerns, and/or suggestions about process.

Future meetings

These Advisory Committee meetings are scheduled for developing recommendations for the first PSNGP. The AC is expected to continue to meet during and after the first PSNGP issuance process.

- Wednesday, June 10: introduce optimization; continue with cap
- Thursday, July 16: introduce short and long-term planning; continue with cap and optimization
- Thursday, August 20: introduce monitoring and compliance; continue with cap, optimization, and planning
- Wednesday, September 30: finalize draft recommendations
- Wednesday, October 21: adopt final recommendations

The facilitator is working with AWC to include local planners in the July 16 and August 20 discussions.

List of acronyms used in this meeting summary

AC – Advisory Committee

AWC – Association of Washington Cities

BOD – Biological oxygen demand

CSO – Combined Sewer Overflow

LOTT – LOTT Clean Water Alliance (a wastewater utility in Olympia, serving the urbanized areas of Lacey, Olympia, and Tumwater in Thurston County)

PSNF – Puget Sound Nutrient Forum

PSNGP – Puget Sound Nutrient General Permit

Puget Sound Nutrient General Permit Advisory Committee (PSNGP AC)

PSNGP AC – Puget Sound Nutrient General Permit Advisory Committee

QA/QC – Quality Assurance and Quality Control

TSS – Total suspended solids

WASWD – Washington Association of Sewer and Water Districts

WEC – Washington Environmental Council

WWWD – Water and Wastewater District

USEPA – U.S. Environmental Protection Agency

Other parties registered for the webinar, and the organizations they represent:

Name	Agency or Organization
Abby Barnes	WDNR
Amanda McInnis	HDR
Amanda Tobin	Pierce County
Bill Davis	City of Bremerton
Brett Stark	HDR
Briahna Murray	Gordon Thomas Honeywell Governmental Affairs
Brian Funk	City of Sultan
Caitlin Dwyer	Lake Stevens Sewer District
Carl Schroeder	Association of Washington Cities
Cassandra Moore	Pierce County
Catherine Drews	City of Bellevue, Washington
Catherine H Gowan	King County Wastewater Treatment Division
Chris Sheridan	Kitsap County
Chris Stoll	
Chris Thomas	The Freshwater Trust
Christopher Giesting	Eastsound Sewer and Water District
Christopher Stoll	Kennedy Jenks
Corrin Hamburg	City of Anacortes WWTP
Dainis Kleinbergs	Dept. of Ecology
Dan Mahlum	RH2
Dave Clark	HDR
David Garlington	City of Sequim
David Peeler	DERT
Donald Seeberger	Coalition for Clean Water
Doug Navetski	King County
Eric Burris	City of Bremerton WWTP
Eron Jacobson	King County Dept Of Natl Res
Gary Duranceau	City of Mount Vernon
Gary Lindsey	
Gregory Zentner	Department of Ecology
Jacque Klug	King County WTD
James Tupper	Tupper Mack Wells
Jan Himebaugh	Building Industry Assoc of Washington

Puget Sound Nutrient General Permit Advisory Committee (PSNGP AC)

Jane Vandenberg	Pierce County
Jason Flowers	Murraysmith
Jeff Clarke	Mukilteo Water and Wastewater District
Jeff Lafer	King County Wastewater Treatment Division
Jeff Langhelm	City of Gig Harbor
Jim Bolger	King County Wastewater
Jim Voetberg	
John Koch	Shelter Bay Community
John Rabenow	City of Everett
Jon Kercher	Pierce County
Joyce Nichols	City of Bellevue
Katherine Brooks	Pierce County Sewer Division
Ken Ziebart	Dept. of Ecology WA
Kirsten McDade	RE Sources
Laurie Pierce	Pierce County
Les Rubstello	City of Lynnwood
Lincoln Loehr	consultant to Everett
M.W. McCarthy	Mac McCarthy, Inc.
Marek Bartyzel	City of Puyallup
Marty Grabill	WSUD-SKWRF
Maureen Meehan	Pierce County SWM
Michael Martinez	NWIFC
Ned Lever	City of Bremerton
Nina Bell	Northwest Environmental Advocates
Oskar Agustsson	HDR
Pamela Randolph	City of Edmonds
Paul Marrinan	City of Puyallup
Peter Burgoon	Gray and Osborne
Richard Kelly	Brown and Caldwell
Robert Waddle	King County
Ron Basinger	City of Sumner
Russ Shiple	Kitsap Building Association
Scott Weirich	Parametrix
Sharman Herrin	King County Wastewater Treatment Division
Shawn McKone	Dept. of Ecology
Stacy Galleher	WA Dept of Ecology
Stella Vakarcs	Kitsap County
Stephen R. Lindstrom	Sno-King Water District Coalition
Steven Chanfrau	Pierce County
Susan Kaufman Una	KCWTD
Teresa Peterson	City of Tacoma
Tim Berge	Southwest Suburban Sewer District
Tom Coleman	RH2 Engineering

Puget Sound Nutrient General Permit Advisory Committee (PSNGP AC)

Tom Knuckey	City of Bremerton
Tom McBride	MPA
Tonya Lane	Washington Dept. of Ecology
Travis Olson	City of Bremerton
Tyler White	City Of Port Angeles
Victoria Boschmans	
Vincent McGowan	WA Dept of Ecology
Zainab Nejati	Thurston County